

REMARKS

Claims 1-17 are pending.

A. Claims 1-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski et al. (5,852,437) [Wugofski] in view of Baggs (US 2002/0164084), Kostreski et al. (5,734,589) [Kostreski], Williams, Jr. et al. (6,175,861, of record) [Williams], Lumelsky et al. (4,949,169) [Lumelsky], Davis et al. (6,449,368) [Davis], Lindemann et al. (2004/0223622, of record), and Reinold et al. (6,175,628) [Reinold]. The Applicant respectfully traverses this rejection for the following reason(s).

The Examiner remarks. regarding claims 1, 3-7, 9, 10, and 12-17 that Wugofski discloses a system for reproducing a digital TV signal, comprising:

a computer system (fig. 1) comprising:

a TV tuner card for receiving the TV signal and separating an audio signal and a video signal from the TV signal for output (fig. 1, TV tuner 122);

a wireless module separately modulating each video component and each audio component, combining the modulated signals and wirelessly transmitting the combined signal from a first antenna (fig. 1, transmitter 148 and antenna 152, see col. 4, lines 8-40);
and

another antenna and demodulator for receiving the combined signal and outputting recovered video signals to a TV for display (fig. 1, antenna 156 and receiver 160, see col. 4,

lines 8-40).

The Examiner then goes on to state that Wugofski fails to disclose the tuner card is digital and receives MPEG-2 video signal, an AC-3 audio decoder for receiving the separated audio signal and outputting 5.1 channel audio; a video decoder for receiving the separated MPEG 2 video signal and outputting an R/G/B video signal; a video signal converter for receiving the R/G/B video signal and outputting a Y/Pb/Pr video signal, said wireless module separately modulating the 5.1 channel audio using different center frequencies, second through seventh antennas and corresponding first through sixth demodulators for receiving the combined signal and outputting recovered 5.1 channel audio to a speaker system, and the display is a digital TV with three demodulators for demodulating the recovered Y/Pb/Pr video signal.

The Examiner then applies the remaining references in a manner that is quite hard to follow, making it appear as though various features, for example, in claim 1, are never addressed in the rejection.

That is, the Examiner has apparently lumped claims 1, 3-7, 9, 10, and 12-17 together, even though the features of claims are quite different, and appears to have made a sweeping, generalized rejection. This makes it hard to understand the rejection and address each feature of each claim in comparison with the applied art.

The Supreme Court in *Graham v. John Deere*, 148 USPQ 459 (decided February 21, 1966), stated that, "Under § 103, the scope and content of the prior art to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in

the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

The Applicant respectfully requests that the Examiner address each claim separately and individually, especially the independent claims, when issuing a rejection.

Claim 1

Claim 1 is directed towards a system for reproducing a digital TV signal, comprising a computer system and a display system.

The computer system comprises:

- a) *a signal dividing means receiving the digital TV signal, and dividing the digital TV signal into digital video signals and digital audio signals after a predetermined signal processing;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing. Wugofski receives a composite analog video signal that includes audio, and apparently has no desire to separate the video and audio signals. The Examiner fails to provide a *prima facie* basis as to why one of ordinary skill the art would have been moved to divide the composite analog video signal into separate video and audio signals. Nor how one would derive separate digital video signals and digital audio signals by dividing a composite analog video signal.

The Examiner does note that a Wugofski discloses a TV tuner 122 (Fig. 1), but erroneously holds that tuner 122 is a "card" within computer system 131.

The Examiner also erroneously holds that the tuner 122 has the function of "receiving the TV signal and separating an audio signal and a video signal from the TV signal for output."

Wugofski discloses that the function of TV tuner 122 is to convert the downconverted broadcast video signal into an analog composite video signal, one example of which is a conventional NTSC signal. The analog composite video signal is then sent along a line 124 to a video decoder 126. The video decoder 126 converts the incoming analog composite video signal from the television tuner 122 into a digital video signal such as a conventional VGA signal.

The Examiner is asked to provide a column number and line number(s) in Wugofski that teaches the tuner 122 has the function of "receiving the TV signal and separating an audio signal and a video signal from the TV signal for output."

b) *a video decoding means decoding the digital video signals outputted from the signal dividing means into analog video signals, and outputting low frequency analog video signals by colors;*

Wugofski does disclose a video decoder 126 (Fig. 1). The video decoder 126 converts the incoming analog composite video signal from the television tuner 122 into a digital video signal such as a conventional VGA signal.

Therefore, video decoder 126 fails to perform *decoding the digital video signals outputted from the signal dividing means into analog video signals, and outputting low frequency analog video signals by colors.*

The Examiner has failed to note that Wugofski fails to teach the foregoing. The Examiner offers no *prima facie* explanation as to why one of ordinary skill in the art would have been moved to provide Wugofski with a video decoder to decode digital video signal, when Wugofski clearly desires, and needs, a video decoder to convert an analog composite video signal into a digital video

signal that can be used by the various components of Wugofski's computer 131, such as the application software 130 and the video controller 136.

In Wugofski, *a video decoding means decoding the digital video signals outputted from the signal dividing means into analog video signals, and outputting low frequency analog video signals by colors* would destroy the way Wugofski's invention is intended to be used and would result in an inoperable device. That is, such a modification would destroy the intended purpose of Wugofski's device such that it would no longer be able to function as intended, and such destruction is an important indication of non-obviousness, see *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

c) *an audio decoding means decoding the digital audio signals outputted from the signal dividing means into analog audio signals with a plurality of channels corresponding to predetermined frequencies;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing. As noted above, Wugofski has no desire to separate the audio signals from the video signals, and even if it did, the audio signals would already have been in analog form. Thus there would be no need for *an audio decoding means decoding the digital audio signals outputted from the signal dividing means into analog audio signals*.

Additionally, since Wugofski desires to apply a composite digital video signal to computer 131, one of ordinary skill in the art would not have been moved to convert the digital signals into *analog audio signals with a plurality of channels corresponding to predetermined frequencies*.

A finding of a *prima facie* case of obviousness requires more than an indication that the elements are known to exist in the art. There must be some reason to combine references other than using the applicant's claims as a blueprint in an improper hindsight rejection.

In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)

One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

In re Rijckaert, 228 USPQ2d 1955 (CAFC 1993) states:

"A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rhinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). If the examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

d) *a plurality of frequency-modulators frequency-modulating the low frequency analog video signals and the analog audio signals, in response to intermediate frequencies, respectively;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing.

We note that the Examiner does mention Wugofski discloses "a wireless module separately modulating each video component and each audio component, combining the modulated signals and wirelessly transmitting the combined signal from a first antenna," and refers us to Fig. 1, transmitter 148 and antenna 152, as well as col. 4, lines 8-40.

Wugofski's transmitter 148 and antenna 152 do not have the function of *frequency-modulating the low frequency analog video signals and the analog audio signals, in response to intermediate frequencies, respectively*. Therefore, it is not clear why the Examiner has referred to transmitter 148 and antenna 152.

- e) *a signal combiner for combining the signals modulated by the plurality of frequency-modulators;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing.

We note again that the Examiner mentioned Wugofski discloses "a wireless module separately modulating each video component and each audio component, **combining** the modulated signals and wirelessly transmitting the combined signal from a first antenna," and refers us to Fig. 1, transmitter 148 and antenna 152, as well as col. 4, lines 8-40.

Wugofski's transmitter 148 and antenna 152 do not have the function of *combining the signals modulated by [a] plurality of frequency-modulators*. In fact, there is no plurality of frequency modulators taught by Wugofski, thus there is no need for a signal combiner.

Therefore, it is not clear why the Examiner has referred to transmitter 148 and antenna 152.

- f) *a wireless transmitter wirelessly transmitting the signals combined by the signal combiner;*

Wugofski does disclose a wireless transmitter (148/152). This appears to be the only feature in Wugofski remotely similar to what has been claimed.

and the display system having:

- g) *a plurality of first wireless receivers wirelessly receiving the analog audio signals transmitted from the wireless transmitter, via the channels;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing.

Wugofski discloses that video encoder 144 receives the digital video data on the line 142 from video controller 138 of computer 131 and converts the digital video data into an **analog composite video signal** (which includes analog video and analog audio signals as is well known). The analog composite video signal is sent via a line 146 to a transmitter 148 which upconverts and amplifies the signal. The signal is then sent via a line 150 to a transmitter antenna 152 for wireless

broadcast 154 over the local transmission band. The wireless broadcast 154 is received by an antenna 156 which then sends the signal through a line 158 to a receiver 160. The receiver 160 downconverts the local transmission signal to a local frequency band and provides the downconverted signal along line 162 as an input to the external video device 164. The external video device 164 may be a television, a video cassette recorder or any other device capable of receiving video signals.

Accordingly, there is no need for *a plurality of first wireless receivers wirelessly receiving the analog audio signals transmitted from the wireless transmitter, via the channels.*

The Examiner has not provided a *prima facie* basis suggesting such a need. Thus, one of ordinary skill in the art would not have been moved to modify Wugofski.

h) *a plurality of first frequency demodulators respectively connected to the first wireless receivers and frequency-demodulating the analog audio signals;*

The Examiner mentions that Wugofski discloses an antenna and demodulator for receiving the combined signal and outputting recovered video signals to a TV for display, and refers us to Fig. 1, antenna 156 and receiver 160, and to col. 4, lines 8-40.

There is clearly a lack of *a plurality of first wireless receivers* and a lack of *a plurality of first frequency demodulators respectively connected to the first wireless receivers.*

i) *a plurality of second wireless receivers wirelessly receiving the analog video signals transmitted from the wireless transmitter;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing.

j) *a plurality of second frequency demodulators respectively connected to the second wireless receivers and frequency-demodulating the analog video signals by the colors;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing.

and

k) *display and audio apparatuses outputting the video and audio signals demodulated by the first and second frequency demodulators, respectively;*

Wugofski is silent in this regard, and the Examiner has failed to note that Wugofski fails to teach the foregoing.

In summary, of features labeled above as a) through k), Wugofski fails to teach all but feature f). In applying Baggs, Kostreski, Williams, Lumelsky, Davis, Lindemann, and Reinold, the Examiner has failed to explain how these references are being applied to, or teach, those features noted above as lacking in Wugofski.

Accordingly, the rejection of claim 1 is deemed to be in error and should be withdrawn.

Claim 2

Claim 2 is directed to the signal dividing means of claim 1, and requires that the signal dividing means comprise:

a digital TV tuner card including a tuner receiving the digital TV signal.

The Examiner notes that Baggs teaches it is well known to incorporate digital TV tuner cards into PCs and to display content on digital TVs, taking advantage of the HDTV format for digital video transmission (paragraph 0023-0024). The Examiner then held it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Wugofski to include the tuner card receives digital TV signals and the TV is a digital TV, as taught by Baggs, for the benefit of allowing a viewer to view HDTV formatted video.

The Applicant notes, that since Wugofski desires to provide digital signals to computer 131, then providing a *digital TV tuner card* in Wugofski's computer 131 would have been obvious.

However, the claims requires that a *signal dividing means* as set forth in claim 1 comprise a digital TV tuner. The Examiner has not provided a *prima facie* showing of a need for a signal dividing means in Wugofski.

And Baggs does not teach a signal dividing means comprising a digital TV tuner card. Baggs merely teaches the use of a digital TV tuner card in a computer.

Accordingly, the rejection of claim 2 is deemed to be in error and should be withdrawn.

Claim 2 requires that the signal dividing means comprise:

a VSB (Vestigial Side Band) demodulating part demodulating a high frequency signal received by the tuner into a VSB analog signal.

Wugofski desires to apply a composite digital video signal to computer 131. One of ordinary skill in the art would not have been moved to convert the digital signals (from Baggs' digital TV tuner card) into *a VSB analog signal*.

The Examiner refers us to Kostreski, col. 20, lines 28-46 with respect to a teaching of "a VSB demodulating part demodulated a high frequency signal received by the tuner into a VSB analog signal."

The Examiner has not provided a *prima facie* explanation as to why one of ordinary skill in the art would have been moved to modify Wugofski to include such a VSB demodulating part, especially since Wugofski desires to utilize digital video signals within computer 131.

Accordingly, the rejection of claim 2 is deemed to be in error and should be withdrawn.

Claim 2 requires that the signal dividing means comprise:

a Viterbi decoder transforming the VSB analog signal into a digital signal.

Since the combination of Wugofski and Baggs already provides a composite digital video signal to elements 130 and 136 in Wugofski's computer 131, as desired by Wugofski, the Examiner should provide a *prima facie* explanation as to why one of ordinary skill in the art would desire to convert this composite digital video signal into a VSB analog signal and then use a Viterbi decoder to convert the VSB analog signal into a digital signal.

Absent such a *prima facie* explanation, the rejection of claim 2 is deemed to be in error and should be withdrawn.

Claim 2 requires that the signal dividing means comprise:

a demultiplexer dividing the digital signal transformed by the Viterbi decoder into the video signal and the audio signal.

There is no desire, or teaching, in Wugofski to separate the composite digital video signal into a separate digital video signal and a separate digital audio signal.

The Examiner refers to teachings apparently found in Williams and Lindemann regarding a demultiplexer dividing the digital signal transformed by the Viterbi decoder into the video signal and the audio signal, indicating that each audio and video component is separated for separate modulation.

The Examiner has not provided a *prima facie* showing as to why one of ordinary skill in the art would desire to perform separate modulation on each audio and video component in Wugofski's computer 131. Wugofski desires to utilize digital video signals within computer 131.

Clearly the Examiner, using hindsight and claims 1 and 2 as a blue print, to pick and choose elements of the prior art to obviate the claims without providing sufficient *prima facie* basis for doing so.

A finding of a *prima facie* case of obviousness requires more than an indication that the elements are known to exist in the art. There must be some reason to combine references other than using the applicant's claims as a blueprint in an improper hindsight rejection.

In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)

One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Accordingly, the rejection of claim 2 is deemed to be in error and should be withdrawn.

Claim 3

Claim 3 requires that the video decoding means include:

a video decoder decoding the video signal outputted from the digital TV tuner card into

R/G/B signals, and a video signal transforming part transforming the R/G/B signals into Y/Pb/Pr low frequency analog video signals.

The Examiner held, albeit erroneously, that "[i]t would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Wugofski, Baggs, Kostreski, and Williams to convert the R/G/B signals into a Y/Pb/Pr (the luminance/chrominance equivalent to the R/G/B format in the analog domain) signal, as taught by Lumelsky, for the benefit of reducing the bandwidth needed to transmit the video signal over the network."

The Examiner has not provided a *prima facie* indication where this supposed "network" is found in Wugofski, such that one of ordinary skill in the art would have found a need for reducing bandwidth in order to transmit a video signal over it.

As noted with respect to claim 1, Wugofski does disclose a video decoder 126 (Fig. 1). The video decoder 126 converts the incoming analog composite video signal from the television tuner 122 into a digital video signal such as a conventional VGA signal.

Wugofski desires that video decoder 126 provide a digital video signal, such as a conventional VGA signal, to computer 131.

The Examiner has not provided a *prima facie* showing as to why one of ordinary skill in the art would have been moved by Lumelsky to provide *Y/Pb/Pr low frequency analog video signals* to Wugofski's computer 131 instead of the desired digital video signal.

A finding of a *prima facie* case of obviousness requires more than an indication that the elements are known to exist in the art. There must be some reason to combine references other than using the applicant's claims as a blueprint in an improper hindsight rejection.

Accordingly, the rejection of claim 3 is deemed to be in error and should be withdrawn.

Claim 4

Claim 4 requires that the the audio decoding means include:

an audio decoder decoding the audio signal outputted from the digital TV tuner card into six audio signals corresponding to 5.1 channels in an AC-3 manner.

Wugofski is silent in this regard, and the Examiner has failed to provide a *prima facie* showing why one of ordinary skill in the art would have been moved separate and decode the digital audio output from the digital TV tuner card (Wugofski and Bragg). Wugofski fails to teach any reason to do so. In fact, Wugofski has no desire to separate the audio signals from the video signals,.

Additionally, since Wugofski desires to apply a composite digital video signal to computer 131, one of ordinary skill in the art would not have been moved to convert the digital signals into *six audio signals corresponding to 5.1 channels in an AC-3 manner*, because the components (130 and 136) of Wugofski's computer would not have been able to uses such analog audio signals.

Accordingly, the rejection of claim 4 is deemed to be in error and should be withdrawn.

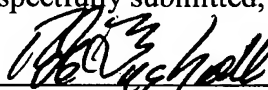
Claims 5-17 are deemed to be non-obvious for the same reasons as discussed above with respect to claims 1-4. The PTO cannot pick and choose among the individual elements of assorted prior art references to recreate the claimed invention. See, e.g., *Azko N.V. v. United States Int'l Trade Comm'n* , 808 F.2d 1471, 1481, 1 USPQ2d 1241, 1246 (Fed. Cir. 1986), cert. denied , 107 S.Ct.

2490 (1987). The PTO has the burden to show some teaching or suggestion in the references to support their use in the particular claimed combination. *Uniroyal Inc.* , 837 F.2d at 1051, 5 USPQ2d at 1438-39. A holding that combination claims are invalid based merely upon finding similar elements in separate prior art patents would be "contrary to statute and would defeat the congressional purpose in enacting Title 35." *Panduit Corp.* , 810 F.2d at 1577, 1 USPQ2d at 1605.

The Examiner is respectfully requested to reconsider the application, withdraw the objections and/or rejections and pass the application to issue in view of the above amendments and/or remarks.

Should a Petition for extension of time be required with the filing of this Amendment, the Commissioner is kindly requested to treat this paragraph as such a request and is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of the incurred fee if, **and only if**, a petition for extension of time be required **and** a check of the requisite amount is not enclosed.

Respectfully submitted,



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